

WHAT IS CLAIMED IS:

2 1. A biphasic antihistamine composition in daily oral

3 uni-dosage or divided dosage form which comprises:

4 (a) a therapeutically effective amount of a sedating
5 antihistamine to inhibit histamine release for a duration of
6 about 4 to 12 hours, and

7 (b) a therapeutically effective amount of a non-
8 sedating antihistamine to inhibit histamine release for a
9 duration of 10 to 20 hours, with a delayed release 6 to 10 hours
10 after ingestion.

11 2. The antihistamine composition defined in claim 1

12 wherein the sedating antihistamine is selected from the group
1 consisting of brompheniramine, chlorpheniramine,
2 dexbrompheniramine, dexchlorpheniramine, carboxamine,
3 clemastine, diphenhydramine, pyrilamine, tripeleannamine,
4 tripolidine, methdilazine, bromodiphenhydramine, promethazine,
5 azatadine, cyproheptadine, diphenylpyraline, doxylamine,
6 trimeprazine, phenindamine, ketotifen, hydroxyzine, tazifylline,
7 temelastine, meclizine, acrivastine, setastine, oxatomide,
8 mequitazine, levocabastine, lodoxamide, AHR 11325, phenindamine,
9 azelastine, and ebastine or a pharmaceutically acceptable salt
10 thereof.

1 3. The antihistamine composition defined in claim 1
2 wherein the non-sedating antihistamine is selected from the group
3 consisting of fexofenadine, loratadine, descarboethoxy
4 loratadine, astemizole, norastemizole, desmethylastemizole,
5 cetirizine, acrivastine, and temelastine, or a pharmaceutically
6 acceptable salt thereof.

1 4. The antihistamine composition defined in claim 1
2 wherein the sedating antihistamine has a duration of activity of
3 about 6 to 10 hours.

1 5. The antihistamine composition defined in claim 1
2 wherein the non-sedating antihistamine has a duration of activity
3 of about 12 to 18 hours.

1 6. The antihistamine composition defined in claim 1
2 wherein the sedating antihistamine is releasable immediately or
3 up to 1 hour following administration.

1 7. The antihistamine composition defined in claim 1
2 wherein the non-sedating antihistamine is releasable 6 to 8 hours
3 following administration.

1 8. The antihistamine composition defined in claim 1
2 which further comprises a therapeutically effective amount of at
3 least one agent selected from the group consisting of an

4 analgesic agent, an antitussive agent, an expectorant, an anti-
5 inflammatory agent, an anti-pyretic agent and a decongestant.

1 9. A method of inhibiting the release of histamine in
2 a patient which comprises the step of administering to the
3 patient, a therapeutically effective amount of the antihistamine
4 composition defined in claim 1.

1 10. The method of inhibiting the release of histamine
2 defined in claim 9 wherein the antihistamine composition is
3 administered during the evening or night and the sedating
4 antihistamine is immediately released.

1 11. The method of inhibiting the release of histamine
2 defined in claim 9 wherein the antihistamine composition is
3 administered during the evening or night and the non-sedating
4 antihistamine is released the next day, 6 to 10 hours following
5 administration.

1 12. The method of inhibiting the release of histamine
2 defined in claim 9 wherein the patient suffers from allergic
3 reaction, allergic rhinitis, cold or flu.

1 13. A biphasic antihistamine composition in daily oral
2 uni-dosage or divided dosage form which comprises:

3 (a) a therapeutically effective amount of a non-
4 sedating antihistamine to inhibit histamine release for a
5 duration of about 10 to 20 hours; and

6 (b) a therapeutically effective amount of a sedating
7 antihistamine to inhibit histamine release for a duration of 4 to
8 12 hours, with a delayed release, 8 to 12 hours after ingestion.

1 14. The antihistamine composition defined in claim 13
2 wherein the non-sedating antihistamine is selected from the group
3 consisting of fexofenadine, loratadine, descarboethoxy
4 loratadine, astemizole, norastemizole, desmethylastemizole,
5 cetirizine, acrivastine, and temelastine, or a pharmaceutically
6 acceptable salt thereof.

15. The antihistamine composition defined in claim 13
wherein the sedating antihistamine is selected from the group
consisting of brompheniramine, chlorpheniramine,
dexbrompheniramine, dexchlorpheniramine, carboxamine,
clemastine, diphenhydramine, pyrilamine, tripeleannamine,
tripolidine, methdilazine, bromodiphenhydramine, promethazine,
azatadine, diphenylpyraline, doxylamine, trimeprazine,
phenindamine, ketotifen, hydroxyzine, tazifylline, temelastine,
meclizine, cyproheptadine, acrivastine, setastine, oxatomide,
mequitazine, levocabastine, lodoxamide, AHR 11325, phenindamine,
azelastine, and ebastine or a pharmaceutically acceptable salt
thereof.

13 16. The antihistamine composition defined in claim 13

14 wherein the non-sedating antihistamine has a duration of activity
15 of about 12 to 18 hours.

1 17. The antihistamine composition defined in claim 13

2 wherein the sedating antihistamine has a duration of activity of
3 about 6 to 10 hours.

1 18. The antihistamine composition defined in claim 13

2 wherein the non-sedating antihistamine is releasable immediately
3 or up to 1 hour following administration.

1 19. The antihistamine composition defined in claim 13

2 which further comprises at least one agent selected from the
3 group consisting of an analgesic agent, an antitussive agent, an
4 expectorant, an anti-inflammatory agent, an anti-pyretic agent
5 and a decongestant.

1 20. A method of inhibiting the release of histamine in

2 a patient which comprises the step of administering to the
3 patient, a therapeutically effective amount of the antihistamine
4 composition defined in claim 13.

1 21. The method of inhibiting the release of histamine

2 defined in claim 20 wherein the antihistamine composition is

3 administered during the day and the non-sedating antihistamine is
4 immediately released.

1 22. The method of inhibiting the release of histamine
2 defined in claim 20 wherein the antihistamine composition is
3 administered during the day and the sedating antihistamine is
4 released in the evening or night, 8 to 12 hours following
5 administration.

1 23. The method of inhibiting the release of histamine
2 defined in claim 20 wherein the patient suffers from allergic
3 reaction, allergic rhinitis, common cold or flu.

1 24. The antihistamine composition defined in claim 1
2 wherein the delayed release portion is achieved by coating a core
3 or granulations with at least one delayed release control polymer
4 selected from the group consisting of ethyl cellulose, cellulose
5 acetate, cellulose acetate phthalate, hydroxypropyl
6 methylcellulose phthalate, polyvinyl acetate phthalate, acrylic
7 acid polymers and copolymers, polymers or copolymers of
8 methacrylic acid, methyl acrylate, ethyl acrylate, methyl
9 methacrylate, ethyl methacrylate, hydroxypropyl methylcellulose
10 acetate succinate, shellac, cellulose acetate trimellitate, vinyl
11 acetate, azo polymers, pectin, chitosan, amylose, guar gum, and
12 zein or combinations thereof.

1 25. The antihistamine composition defined in claim 8
2 wherein the analgesic agent, antitussive agent, expectorant,
3 anti-inflammatory agent or decongestant is in a sustained release
4 form.

1 26. The antihistamine composition defined in claim 25
2 wherein the sustained release effect is achieved by formulating
3 the analgesic agent, antitussive agent, expectorant, anti-
4 inflammatory agent or decongestant with a sustained-release
5 control polymer selected from the group consisting of methyl
6 cellulose, ethyl cellulose, wax, gums, cellulose acetate,
7 cellulose acetate phthalate, hydroxypropylmethylcellulose acetate
8 succinate, polyvinyl acetate phthalate, acrylic acid polymers and
9 copolymers, polymers or copolymers of methacrylic acid, methyl
10 acrylate, ethyl acrylate, methyl methacrylate, ethyl
11 methacrylate, hydroxypropyl methyl cellulose acetate succinate,
12 shellac, cellulose acetate trimellitate, vinyl acetate and
13 combinations thereof.

1 27. The antihistamine composition defined in claim 13
2 wherein the delayed release portion is achieved by coating a core
3 or granulations with at least one delayed release control polymer
4 selected from the group consisting of ethyl cellulose, cellulose
5 acetate, cellulose acetate phthalate, hydroxypropyl
6 methylcellulose phthalate, polyvinyl acetate phthalate, acrylic
7 acid polymers and copolymers, polymers or copolymers of

8 methacrylic acid, methyl acrylate, ethyl acrylate, methyl
9 methacrylate, ethyl methacrylate, hydroxypropyl methylcellulose
10 acetate succinate, shellac, cellulose acetate trimellitate, vinyl
11 acetate, azo polymers, pectin, chitosan, amylose, guar gum, and
12 zein or combinations thereof.

1 28. The antihistamine composition defined in claim 19
2 wherein the analgesic agent, antitussive agent, expectorant,
3 anti-inflammatory agent or decongestant is in a sustained release
4 form.

1 29. The antihistamine composition defined in claim 28
2 wherein the sustained release effect is achieved by formulating
3 the analgesic agent, antitussive agent, expectorant, anti-
4 inflammatory agent or decongestant with a sustained-release
5 control polymer selected from the group consisting of methyl
6 cellulose, ethyl cellulose, wax, gums, cellulose acetate,
7 cellulose acetate phthalate, hydroxypropylmethylcellulose
8 phthalate, polyvinyl acetate phthalate, acrylic acid polymers and
9 copolymers, polymers or copolymers of methacrylic acid, methyl
10 acrylate, ethyl acrylate, methyl methacrylate, ethyl
11 methacrylate, hydroxypropyl methyl cellulose acetate succinate,
12 shellac, cellulose acetate trimellitate, vinyl acetate and
13 combinations thereof.